#### HAZARDOUS WASTE MANAGEMENT PLAN

Standard Operating Procedures 8221-007

## **INTRODUCTION**

Hazardous waste presents numerous health and environmental dangers. It comes in all shapes and forms: liquid, semisolid, solid, or contained gas. Hazardous waste may be the by-product of our operating processes or more simply, unused and discarded hazardous materials. This Hazardous Waste Management Plan is meant to act as a guide and resource for the handling of hazardous materials and waste by park personnel. Regardless of the form we may be presented with, proper management and disposal of hazardous waste is essential to the environment and operations of Grand Canyon National Park.

#### **POLICY**

It is the policy of Grand Canyon National Park to comply with all federal, state, and county laws, regulations and guidelines for the prevention, control, and abatement of environmental pollution.

Management of hazardous waste must begin with minimization practices. The easiest way to reduce the need for hazardous waste disposal is to minimize the amount of hazardous waste produced. Unless we can limit the amount of hazardous waste we produce, we will be in a constant mode of disposing of this waste. Pollution prevention is any practice which reduces the amount of a hazardous substance, pollutant, or contaminant entering and waste stream or otherwise released into the environment (including fugitive emissions) prior to recycling, treatment, or disposal; and any practice which reduces the hazards to public health and the environment associated with the release of such substances, pollutants or contaminants. This can be achieved at the source of hazardous waste a pollution generation through; material substitution, product changes, improved housekeeping, process changes, and in-line/on-site recycling.

We must reduce the volume and toxicity of hazardous waste generated in Grand Canyon National Park (GRCA) to ensure not only a reduction of cost and regulation for the park, but to also help create a safe and clean environment for employees and park visitors.

GRCA's Hazardous Waste Management Plan applies to the procurement, handling, storage and disposal of hazardous waste generated from operations and maintenance activities. The purpose of the GRCA Hazardous Waste Management Plan is to provide park personnel with guidance for the proper management of hazardous waste and materials. This plan does not apply to:

- 1. Underground Storage Tanks
- 2. Hazardous Waste Sites
- 3. Asbestos Removal

## **LEGAL AUTHORITY**

- Resource Conservation and Recovery Act (RCRA)
- Code of Federal Regulations Title 40 Part 260-262
- Code of Federal Regulations Title 29 Part 110.1200.
- State and local laws and regulations

## **Consequences of Non-compliance**

"As a result of the waiver of sovereign immunity contained in the Federal Facilities Compliance Act of 1992, regulatory agencies can undertake civil and criminal enforcement actions in response to RCRA violations at Federal Facilities. Under RCRA, civil penalties are amassed on a per violation per day basis and can be assessed at a maximum of \$25,000 per day.

Whereas the National Park Service is subject to civil penalties as an organization, Park employees, as individuals, may be held personally liable for criminal violations. Criminal charges can be brought if the State or EPA believes that individuals knowingly violated the law. Criminal penalties may include substantial fines and/or imprisonment. In addition to the individual who was directly responsible for hazardous waste management and who may have been involved in the activity causing the violations, criminal prosecutions typically target upper management and the entire management line-of-command under the assumption that these individuals are responsible for ensuring that resources are allocated and that actions are taken to ensure compliance with applicable laws. If a criminal action is taken against a federal employee, the Department of Justice will not represent the employee because criminal conduct is considered beyond the scope of employment. However, employees may seek the assistance of private counsel to represent them.

# Abandoning or improperly disposing of hazardous waste is a violation of federal law and employees can be prosecuted.

Because the National Park Service is the landowner, regulatory agencies can hold NPS civilly and criminally liable for the violations of non-NPS park users. NPS also may unwittingly bear the expense of cleaning up areas of contamination caused by non-NPS park users if NPS does not monitor their activities and ensure conformance to applicable laws and regulation. Therefore, National Park Service managers are responsible for monitoring the actions of tenants, concessionaires, and special use permitees.

Since the waiver of sovereign immunity contained in the Federal Facilities Compliance Act does not extend to hazardous materials, NPS is not compelled to comply with local and State statutes that address hazardous materials exclusively (and not hazardous waste). NPS may choose to comply with the Community Right-to-know hazardous materials ordinances voluntarily, but NPS is not subject to fees or penalties associated with these programs." (SFM NHP, 1996)

## RESPONSIBILITY

# Superintendent

- 1. Requires compliance with laws and regulations pertaining to storage, handling, and disposal of routinely generated hazardous waste: has overall responsibility for the program.
- 2. Provides necessary resources to facilitate compliance.
- 3. Represents park program requirements to regional staff and line management.

## Park Hazardous Waste Coordinator (HWC)

- 1. Provides technical guidance to division chiefs, employees, and other staff members on compliance with laws and regulations pertaining to procurement, storage, handling, and disposal of routinely generated hazardous waste and other program issues.
- 2. Coordinates park hazardous waste storage.
- 3. Coordinates park hazardous waste removal.
- 4. Coordinates park training in handling hazardous waste.
- 5. Maintains park hazardous waste inventory list.
- 6. Conducts weekly inspections of hazardous waste storage facilities.

- 7. Conducts annual inspection of park facilities to ensure compliance.
- 8. Updates and revises the Hazardous Waste Management Plan every two years.

## **Division Chiefs and Supervisors**

- 1. Division Chiefs, District Rangers, and all other supervisors are responsible for assuring that personnel within their area of responsibility comply with guidelines.
- Division Chiefs, District Rangers, and all other supervisors are responsible for providing funding for the disposal of all hazardous waste generated by their work unit.
- 3. Each maintenance foreman will be responsible for the management of all hazardous material or waste his or her unit uses or generates. He or she will also manage the storage of hazardous waste turned in by non-maintenance personnel. The operation of this may be delegated to a subordinate, but the overall responsibility remains his or hers
- 4. Non-maintenance personnel, (i.e., rangers, resource management, interpreters, etc.) shall deposit their waste at the nearest maintenance activity storage facility. Waste shall not be left unless the maintenance foreman for those designated areas logs it in.
- 5. Division Chiefs and supervisors must ensure compliance with laws and regulations pertaining to the procurement, storage, handling and disposal of routinely generated hazardous waste.
- 6. Division Chiefs and supervisors control inventory and shall not allow "free choice access" to chemical stocks.

#### **All Other Park Staff**

All park staff must comply with the guidelines of this plan. If staff is uncertain as to the proper handling or disposal of a particular material, it is their responsibility to seek out guidance from their supervisor and/or the Park Hazardous Waste Coordinator.

## Non-NPS Park Users

Hazardous waste generated by Concessionaires and other cooperators at GRCA will not be stored in NPS hazardous waste storage facilities. They will be responsible for providing and managing their own facilities.

## PROGRAM OBJECTIVES

Reduce the hazardous waste generated in the park by:

Purchasing the least toxic material that will accomplish the task; hazardous material should only be purchased after an exhausting search for non-hazardous materials. Encourage the use of alternative methods or materials if available.
 Materials which contain the following 17 chemicals will not be purchased without the Hazardous Waste Coordinator's approval. Approval is contingent on the purchaser's justification that shows no other product will perform the function.

Benzene

Carbon tetrachloride

Chromium and compounds

Lead and compounds

Methyl Ethyl Ketone

Methyl Isobutyl Ketone

111 Trichloroethane (methyl chloroform)

Xylenes (all)

Cadmium and compounds

Chloroform (trichloromethane)

Mercury and compounds

Methylene chloride

Nickel and compounds

Toluene

Trichloroethylene

Tetrachloroethylene

Cyanide compounds (inc'l hydrogen cyanide)

- Purchasing hazardous materials in small quantities; avoid purchasing more of a hazardous product than needed. Buy only material GRCA is equipped to handle and can completely use in one year or less.
- Recycling as much waste as possible; reduce the amount of hazardous waste generated by recycling and reusing hazardous waste if possible, (i.e. solvent recycling, anti-freeze recycling, and waste oil recycling.)
- Avoiding mixing non-hazardous and hazardous waste; avoid putting non-hazardous cleaning agents or rags in the same containers as hazardous solvents, as the entire contents may become subject to hazardous waste regulation.
- Avoiding mixing several different hazardous wastes; mixing could create very dangerous chemical compounds and doing so can make recycling very difficult, if not impossible, or make disposal more expensive.

- Avoiding spills or leaks of hazardous products; the materials used to clean up such spills or leaks will also become hazardous waste.
- Making certain original containers of hazardous products are completely empty; use the entire product.

#### **PROCEDURES**

Hazardous waste will not be disposed of in dumpsters, septic systems, storm drains, washracks, oil-water separators, or landfills. Hazardous waste must be disposed of using a contract, administered by the Contracting Office.

It is the responsibility of the division that generates or owns any hazardous material or waste to properly and accurately identify it, label it, have current MSDS sheets for it, properly inventory it, and expedite its storage and eventual disposal.

## **Identifying a Hazardous Waste**

It is important to note the difference between hazardous waste and hazardous materials. Hazardous materials are useful products that exhibit characteristics such as ignitability, corrosiveness, reactivity, or toxicity. A hazardous material becomes a hazardous waste when it can no longer be used for its intended purpose because it is contaminated, used, spent, beyond its shelf life, etc. The owner of the hazardous material is responsible for determining when that material can no longer be used and thus, when it becomes a hazardous waste.

Hazardous waste is any solid, liquid, or contained gaseous material that is no longer used or useable and could cause injury or death to humans, or damage and/or pollute the environment.

Materials become hazardous waste when they are no longer used and meet one of the following four conditions:

- 1. The material exhibits a characteristic of a hazardous waste as defined in 40 CFR Sections 261.20 through 262.24: i.e., ignitability, corrosiveness, reactivity, or toxicity.
- Ignitable waste is that which is easily combustible or flammable, i.e. some paints, degreasers, or other solvents.
- Corrosive waste is that which dissolves metals and other materials, or burns the skin, i.e. rust removers, acid or alkaline cleaning fluids, or battery acid.
- Reactive waste is that which is unstable or undergoes rapid or violent chemical reactions with water or other materials, i.e. cyanide plating, bleaches, or other oxidizers.

- Toxic waste is that which is tested and shows extraction procedures (EP) toxicity.
  Waste is EP toxic if an extract from the waste is tested and found to contain high
  concentrations of heave metals (such as mercury, cadmium or lead) or specific
  pesticides that could be released into the ground water.
  - Examples of dangerous wastes include: discarded gasoline, oil-based paints, varnish, and solvent.
  - Examples of extremely hazardous wastes include discarded paint containing lead, chrome or other heavy metals (including latex paint containing phenylmercuric acetate as a preservative.
  - Examples of acutely hazardous waste are pesticide wastes such as dioxin waste or pentachlorophenol.
- 2. The material is listed as hazardous in 40 CFR Sections 261.31 through 261.33
- 3. The material is a mixture containing a listed hazardous waste and a nonhazardous solid waste (unless the mixture is specifically excluded or no longer exhibits the characteristics of hazardous waste).
- 4. The material is not excluded from regulations as a hazardous waste.

Hazardous materials that may become hazardous waste in the park include solvents, painting products, some lubricants, cleaners, degreasers, pesticides, wood preservatives, battery acid, herbicides, transformers containing PCBs and laboratory substances, etc.

Make sure your waste is hazardous before labeling and inventorying it for storage and disposal. For example: expired oil based paints should be disposed of as a hazardous waste. On the other hand, most expired latex paint can be disposed of by:

- Applying excess paint to cardboard or other surface to let dry.
- Evaporating carrier, making sure paint is completely hardened and disposing as non-hazardous waste.

## **Labeling Requirements**

Division Chiefs or their designees will ensure that work project leaders under their supervision expedite labeling, tagging, or marking of all hazardous waste in their areas.

A hazardous waste label must be placed on all containers containing hazardous waste. This label must have the words "HAZARDOUS WASTE" on it, and the following information clearly stated:

- 1. Identification of waste contents, not the original product if reusing containers.
- 2. Generator identification and EPA I.D. #. (to be filled in by HWC)

- 3. Proper DOT shipping name.
- 4. Proper DOT identification number.
- 5. Proper U.S. EPA waste code number
- 6. Proper U.S. EPA hazard code
- 7. Date substance was first added.
- 8. Date when it becomes full.
- 9. Any safety precautions or warnings

NOTE: Hazardous waste labels will be available inside each storage building.

# **Special Labeling Requirements**

Used Oil: drums with used oil destined for recycling should be labeled "Used Oil - Hold for Recycling."

Lead-acid batteries: spent lead-acid batteries should be labeled "Lead-acid Batteries – Hold for Recycling."

# **Inventory Requirements**

Divisional inventories will designate what is considered to be hazardous waste, and what are usable hazardous materials. All inventory reports will be submitted to the HWC for comment. The original inventory report will then be filed in the HWC's master file, and a copy of divisional inventories will be on file in each division.

Inventory of all toxic substances in the park will be completed and annually updated no later than August 31. The HWC will arrange and request this inventory from all park division chiefs or their designees. Divisional inventories shall be explicit in identification of chemical names, hazard labeling, storage containers, quantity, and location.

Hazardous Waste Storage buildings are located at Desert View, North Rim and South Rim and each area must have a master inventory of all hazardous waste stored in their building. The inventory documentation shall include.

- 1. Storage container size and location.
- 2. Product name.
- 3. First date of accumulation.
- 4. Total accumulated to date.
- 5. EPA hazard code.
- 6. Division disposing of the substance.
- 7. Account number paying for disposal.

Hazardous waste inventories will be reported to the Hazardous Waste Coordinator every sixty days, due on February 28, April 30, June 30, October 30, and December 31.

A summary report outlining the various hazardous materials used and stored at GRCA will be submitted annually to the following individuals or agencies:

- Park Safety Manager
- Assistant Superintendent, GRCA
- GRCA Emergency Services Branch
- Fred Harvey Fire and Safety

## **Storage and Segregation Requirements**

GRCA Hazardous Waste Storage buildings are located at Desert View, North Rim and South Rim. These buildings must be clearly marked with signs reading:

- "DANGER HAZARDOUS WASTE STORAGE AREA AUTHORIZED PERSONNEL ONLY NO SMOKING NO STORAGE OF COMBUSTIBLE MATERIALS NEAR THIS BUILDING."
- Emergency telephone numbers of people/organizations to call in case of a spill or emergency. At a minimum, the sign should state "IN CASE OF SPILL OR EMERGENCY, IMMEDIATELY CALL 911, DISPATCH."

Hazardous waste can be stored in 55-gallon drums, tanks, or other containers suitable for the type of waste generated. If a container is damaged or leaking, that container must be placed in a larger container which is in good condition.

Each container must be clearly labeled with a hazardous waste label, EPA hazardous waste code, and have an MSDS attached.

A Hazardous Waste Coordinator for each Hazardous Waste Storage building will be responsible for coordinating placement of hazardous waste in those buildings. All waste must be logged in at the Hazardous Waste Storage buildings at the time they are deposited and managed by the designated maintenance foreman. The log, located in the Hazard Waste Storage buildings, should contain the following:

- 1. Date deposited.
- 2. Type of waste
- 3. Quantity deposited
- 4. Type of container or which container the waste is deposited in.
- 5. Division the waste was generated by.
- 6. Account # for disposal billing.

Hazardous Waste Storage buildings will be secured (locked), and entrance limited to authorized personnel.

The following guidelines must be followed when storing hazardous waste.

- 1. All hazardous waste must be deposited through approval of the Hazardous Waste Coordinator.
- 2. All stored hazardous waste must be appropriately labeled.
- 3. A Material Safety Date Sheet (MSDS) should be attached to the container in which the waste is stored.
- 4. Containers with hazardous waste will be placed in designated hazardous waste storage buildings.
- 5. Containers will be kept in good condition, handled with care, and replaced if found to be leaking.
- 6. Containers will be kept closed except during transfer of waste to and from those containers.
- 7. Containers will not be used if the substance will cause rupture, leakage, corrosion, or other failure.
- 8. Flammable hazardous waste must be stored in accordance with National Fire Protection Association (NFPA) standards.
- 9. Different hazardous wastes shall not be stored in the same container where they can react together and cause fire, leaks, or other releases.
- 10. An MSDS shall be used to determine what personal protective equipment will be used when handling a hazardous waste or material. The recommended equipment will be provided on site and used.
- 11. Never mix different hazardous wastes together.
- 12. Never mix non-hazardous waste with hazardous waste.
- 13. Never store corrosives above any other hazardous waste.
- 14. Avoid spills or leaks of hazardous products. Materials used to clean up a spill or a leak will also become hazardous waste.
- 15. Storage facilities must be well maintained and inspected for leaks and deterioration of containers on a weekly basis.

## **Disposal of Hazardous Waste**

A contractor shall remove all hazardous waste generated at GRCA from site.

All hazardous waste will be disposed of at an EPS and/or state approved disposal site within the time frame established by federal, state and local regulations. All contract handlers and haulers shall be approved or certified by federal, state, and local agencies.

All hazardous waste manifests, test results, and other records and reports required by federal, state and local regulations shall be maintained in official park files for no less than three years from the date of disposal or longer as required by current federal, state and local standards.

# **Disposal of Special Hazardous Items**

- 1. Radioactive materials or any material or combination of materials that voluntarily cause ionizing radiation, although not managed under hazardous waste regulation, must be intensely controlled. Contact the HWC/safety officer for details on handling and controlling ionizing and non-ionizing materials and equipment.
- 2. Most scrap metal is non-hazardous solid waste. The following items cannot be processed as scrap and must be reported and disposed as hazardous waste since they may contain or be contaminated with oil, hydraulic fluid, fuel residue, lead deposits, PCB's or asbestos.
  - Asbestos containing brake shoes or clutches
  - Mufflers and exhaust pipes
  - Hydraulic rams or hoses containing oils
  - Fuel tanks
  - Shock absorbers
- 3. Rags: oily and greasy rags must be cleaned. If contaminated beyond cleaning, dispose as a hazardous waste.
- 4. Sweeping compound: if not contaminated, dispose of in the trash. If saturated or contaminated with a hazardous substance, report it as a hazardous waste.
- 5. Oil and fuel filters: filters will be punctured, hot drained, crushed and sent out for scrap metal recovery. Transmission and fuel filters are to be thoroughly drained and discarded.
- 6. Old refrigerators or freezers: freon must be removed and disposed of as hazardous waste before refrigerators and freezers can be removed from the park.

## **Disposal of Empty Containers**

1. Paint: All sizes of empty non-aerosol, enamel and lacquer paint containers will be left open, the paint allowed to dry thoroughly, and then discarded as trash. Containers are not considered empty when there is liquid covered by a "dry film".

#### 2. Solvents and Thinners:

- a. Empty one-gallon or smaller containers will be left open to thoroughly dry and then disposed as trash.
- b. Empty containers over one gallon in size will be drained to less than 1 inch of residue, secured in hazardous waste shed, labeled with a hazardous waste label, an empty label, and reported as hazardous waste. For low turnover items, containers must be non-leaking and safe, and closed with an appropriate top, cap, or lid.

## 3. Oils and Greases:

- a. Empty one-gallon or smaller containers will be thoroughly drained into the waste oil tank or drum and then discarded as trash.
- b. Empty containers over one gallon in size will be handled as stated in 2.b. above.

# **Transportation**

Transportation of hazardous wastes at GRCA shall only be accomplished in strict accordance with the following:

- 1. Vehicles used to transport hazardous waste within Park boundary must meet DOT safety requirements.
- 2. Hazardous waste shall <u>not</u> be transported on any public highway/road, etc., except by a State of Arizona licensed hazardous waste hauler using a Uniform Hazardous Waste Manifest. This includes S.R. 64.
- 3. Hazardous waste generated at GRCA may only be transported on government property by the generating personnel from the generation point to the approved hazardous waste storage buildings for that unit.
- 4. Generating units are responsible for arranging the loading and transportation of hazardous waste.
- 5. Hazardous wastes will be secured during transportation to avoid spills.
- 6. All containers shall be transported in an upright position.
- 7. Incompatible wastes such as acids and flammables will **not** be transported on the same vehicle.

## **TRAINING**

Federal and state law requires that all personnel managing or handling hazardous waste must be trained, either through classroom instruction or on-the-job training, to respond to emergencies, protect the environment, and properly handle and dispose of hazardous waste.

Each person handling or managing hazardous waste must complete a minimum of 24 hours of introductory training and 8 hours of annual update training. The introductory training must be completed within six months of the date the employee begins his or her job of handling hazardous waste.

Hazardous waste managers and handlers will update their training annually by completing an 8-hour hazardous toxic waste refresher training course.

Each division will develop a program to train its hazardous waste handlers. All instances of training must be documented and the following records kept on site:

- 1. Job title, job description, and amount and type of training to be completed by each position involved in managing or handling hazardous waste.
- 2. Names of the employee(s) filling each position and records that document the actual training completed by each person. A roster will be prepared containing the name, job position, and date training was conducted.

## ORDERING HAZARDOUS WASTE MANAGEMENT MATERIALS

Divisions and units are responsible for ordering and obtaining all hazardous waste management materials necessary to operate in full compliance with all pertinent laws and regulations and this document.

The Warehouse will stock labels, overpack drums, and absorbent for purchase.

## **FUNDING**

The management, transportation, and disposal of hazardous waste is quite costly. Disposal costs can range from \$50 to \$5,000 per gallon. Unidentified hazardous wastes are the most costly to dispose of.

The generation of hazardous waste is directly related to the operations of the generating division or unit. Accordingly, all disposal costs shall be funded by the generating division or unit. The costs of the disposal of hazardous waste must be considered during budget formulation and project development.

#### **EMERGERCY RESPONSE**

Any response to an incident involving a hazardous materials spill can be described in four different phases:

- 1. Phase 1: discovery and notification.
- 2. Phase 2: on scene coordinator conducts a preliminary assessment.
- 3. Phase 3: containment, cleanup, recovery and disposal activities required to gain control of the spill and limit injury to the environment.
- 4. Phase 4: litigation.

Due to the nature of the operation and the quantity of wastes in the park at any one given time, there is little potential for a major environmental emergency. However, there is always the potential for flammables to cause a fire or explosion or for toxic or corrosive waste to harm the personnel handling it. If an unplanned release occurs, the basic strategy is to contain and absorb the waste, then transfer the absorbent and waste to an appropriate container. However, the first priority will be protection of personnel present. If personnel should come into contact with waste and become injured, they should be treated as appropriate for the waste's hazardous characteristics.

Basic guidance in response will be from the GRCA Hazardous Materials Spill Contingency Plan. Dispatch or the nearest Protection Ranger will be notified of any spill. The On Scene Coordinator will be notified and assign the Incident Commander for the containment and cleanup operations. Dispatch will notify the Safety Manager and the HWC.

#### RESPONSE TO DISCOVERING HAZARDOUS MATERIALS IN THE FIELD

Employees will be trained on how to respond to discovering unknown hazardous materials, such as drums, cylinders, canisters, sacks, or material in piles of solid, pools of liquid, or clouds of gases.

## General procedures when hazardous materials are discovered:

- 1. Personal safety must be the first consideration of an employee making a discovery. Treat an unidentified substance as hazardous. Do not presume that it is safe.
- 2. Remain a safe distance from the suspect material. Do not smell or taste material.
- 3. If smoke or vapors are present, stay upwind of the site, if possible.

- 4. Do not open or move any container. In particular, do not handle the material, breathe the vapors, or make contact with the materials.
- 5. Do not collect samples of unknown materials.
- 6. If contact with suspected hazardous materials is made, the exposed person should seek medical assistance immediately or emergency first aid should be administered if necessary.
- 7. From a safe distance, attempt to determine and record as many of the following items as possible:
  - Nature of suspected materials (gas, solid, liquid, color, odor, etc.):
  - Type of containers
  - Evidence of leakage from containers
  - Approximate number of containers
  - Any potential identifying markings on containers (company name, serial number, signs)
  - Location of the site as precisely as possible
  - Evidence of dead plants or animals around or near the site
- 8. Make notification as soon as possible.

#### ADDITIONAL ELEMENTS OF HAZARDOUS WASTE PROGRAMS

## **Concession Operations**

- Concessions and other cooperators (i.e. APS, US West, etc.) at GRCA must be in compliance with all federal, state, and county laws, regulations, and guidelines for the prevention, control, and abatement of environmental pollution.
- Concessionaires are required by OSHA to train their employees in the same manner as the National Park Service.
- The concessionaires will be responsible to properly manage and account for the disposal of their hazardous wastes according to state and federal regulations.

- They will be subject to periodic review by the Safety Manager and the HWC of their product inventory, MSDS collection, and tailgate safety sessions to assure compliance with regulations.
- They will be required to annually complete the Hazardous Waste Management Checklist and return it to the park. The concessionaire must prepare spill plans and submit them to both the state and the park.

## **Contractor Exposure**

Potential for toxic or hazardous exposure by non-NPS employees doing work on government property should be clearly articulated in pre-construction conferences and/or written into the contract specifications. The Contracting Officer Representative (COR) or authorized Project Inspector should monitor proper execution of the job from start to finish. This role should include monitoring proper disposal of all hazardous wastes. The Safety Manager or HWC should be contacted if assistance is needed.

## CONCLUDING COMMENTS

Good hazardous waste management can be thought of simply as using "good housekeeping" practices such as: using and reusing material as much as possible; recycling or reclaiming waste; treating waste to reduce its hazards; and most importantly, reducing the amount of waste generated. Reducing the amount of hazardous waste means saving money on raw materials and reducing the costs to GRCA for the management and disposal of the hazardous waste generated.

The ability to understand the role that hazardous waste management plays within the National Park Service should be a concern for all park personnel, regardless of their specific job duties. This point cannot be overstated, because only when all NPS employees are cognizant of our mission – to conserve, preserve, and protect our natural, historical and culturally significant resources for ourselves and future generations – can we ensure their lasting support. This awareness coupled with a systematic hazardous materials inventory and control program, is the essence of the GRCA Hazardous Waste Management Plan.

/S/	1/19/01
Prepared	Date
John Beshears	
Civil Engineer	
/S/	1/12/01
Approved by	Date
Curt Edlund	
Chief of Maintenance & Engineering	
<u>/S/</u>	1/16/01
Approved by	Date
James T. Reynolds	
Deputy Superintendent	